A method of suppressing a narrow-band interference in a broadband communication system, wherein a broadband noise signal is formed in the transmission channel in a frequency band (F_0, F_1); the broadband noise signal is modulated by a given

5 modulation technique to modulate the power thereof at a modulation frequency $F_{mod} \ll (F_1 - F_0)$; the resultant signal is passed through a propagation medium and received by the receiver together with a narrow-band interference superimposed thereon in the propagation medium, and filtered in the frequency band (F_0,

10 F_1); two signals are formed, one of which is obtained by amplifying the signal filtered in the frequency band (F_0, F_1) and limiting the amplitude thereof, and the second signal is the above filtered signal or a filtered signal linearly amplified without altering the shape thereof; the two signals thus obtained

15 are multiplied; the resultant signal is filtered in the frequency band [ΔF_{nar}, ($F_1 - F_0$)]; and the envelope of the signal obtained is separated and demodulated to obtain an information signal, wherein ΔF_{nar} is the frequency band of the squared amplitude variation spectrum of the interference voltage.

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